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(12) **United States Patent**
Yock et al.(10) **Patent No.:** **US 6,346,098 B1**(45) **Date of Patent:** **Feb. 12, 2002**(54) **METHODS AND KITS FOR LOCALLY
ADMINISTERING AN ACTIVE AGENT TO
AN INTERSTITIAL SPACE OF A HOST**(75) **Inventors:** Paul G. Yock; Ali H. Hassan; Alan
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Stanford Junior University, Palo Alto,
CA (US)(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.(21) **Appl. No.:** 09/519,950(22) **Filed:** Mar. 7, 2000(51) **Int. Cl.⁷** A61M 25/00; A61K 38/00;
A61K 48/00; A61K 31/715(52) **U.S. Cl.** 604/508; 604/507; 514/2;
514/44; 514/54(58) **Field of Search** 514/2, 44, 54;
604/96.01, 508, 509, 510, 507; 607/1; 11/11(56) **References Cited****U.S. PATENT DOCUMENTS**

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Field & Francis(57) **ABSTRACT**

Methods are provided for locally administering an agent to a host. Specifically, the subject methods provide for the local administration of an agent to an interstitial space of a host. In the subject methods, an agent is retroinfused into a vessel of a host, typically a vein, under conditions sufficient for the agent to enter an interstitial space of the host proximal to the vessel location into which the agent is retroinfused. In practicing the subject methods, the agent is administered to the host in combination with the production of vascular stress at the site of administration, where the vascular tissue stress is sufficient to provide for transport of the agent from the vascular site of deposition into the target interstitial space. In a preferred embodiment, the agent is retroinfused at a pressure sufficient to provide for mechanical stress on the vessel proximal to the target interstitial space. Also provided are kits for use in practicing the subject methods. The subject invention finds use in the local administration of a variety of different agents for treatment of a variety of different disease or other conditions.

19 Claims, 2 Drawing Sheets